

ABSTRACT OF THE DISCLOSURE

A catheter is provided having a system for anchoring an inflatable balloon at a treatment site. The system includes a flexible member having a substantially cylindrical shaped wall that defines a longitudinal axis. The outer
5 surface of the cylindrical wall is formed with a plurality of protuberances that each project radially outward from the wall. With this structure, the wall seamlessly interconnects the protuberances together. In one embodiment, the flexible member constitutes a portion of a dilatation balloon. In another
10 embodiment, the flexible member is formed as a jacket that is placed over and bonded to a dilatation balloon. The protuberances are sized, shaped and spaced on the wall of the flexible member to allow each protuberance to penetrate and become embedded in a lesion at a treatment site during inflation of the balloon. Once embedded, the protuberances anchor the balloon at the treatment site.